

Remarks:

Applicants have carefully studied the final Examiner's Action mailed 01/05/2007, having a shortened statutory period for response set to expire 04/05/2007, and all references cited therein. The amendment appearing above and these explanatory remarks are believed to be fully responsive to the Action. Accordingly, this important patent application is now believed to be in condition for allowance.

Applicants respond to the outstanding Action by centered headings and numbered paragraphs that correspond to the centered headings and paragraph numbering employed by the Office, to ensure full response on the merits to each finding of the Office.

Priority

1. Applicants will file a Petition under separate cover to correct the priority claim.

Claim Rejections – 35 USC 112

2. Applicants acknowledge the quotation of 35 U.S.C. 112, first paragraph.
3. Claims 1 and 4-14 stand rejected under 35 U.S.C. 112, first paragraph, because the limitation "under any configuration of offtake" is not supported by the specification. Claim 1, as currently amended, does not contain such limitation. However, the specification clearly recites that fluid does flow through the system under any configuration of offtakes. When all offtakes are closed, fluid flows from the storage vessel to the branch manifold, to the offtakes, to the return manifold, and back to the storage vessel. This flow is described in several locations throughout the specification. When at least one offtake is open, the above described flow continues with the exception that the direction of flow between the open offtake to the return manifold reverses so that fluid flows from the return manifold to the open offtake. Obviously, the same holds true when a second offtake is opened, and continues to hold true under any configuration of open and closed offtakes, including the configuration where all offtakes are open. This continual, never interrupted flow is the heart of the invention because contaminants require stagnant water to thrive. Accordingly, the novel structure set forth in each independent claim enables fluid flow in a first direction through the first path of travel just stated when all offtakes are closed and further enables fluid flow in a reverse direction for that part of the system between a first open offtake and the return manifold when the first offtake is open, between a

second offtake and the return manifold when the second offtake is open, and so on, for any configuration of open and closed offtakes.

Claim Rejections – 35 USC § 103

4. Applicants acknowledge the quotation of 35 U.S.C. § 103(a).

5. Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Dunnleider in view of Rjornsson. Reconsideration and withdrawal of this ground of rejection is requested because neither of said disclosures, taken singly or together, teaches or suggests the invention as claimed. Dunnleider provides two circuits through which water flows. The first circuit has no consumer taps or offtakes. Water in the first circuit is heated to kill or reduce the numbers of legionella and the second circuit is maintained in an empty, no water status. After the water in the first circuit is heated until it is deemed safe, then the first circuit is opened into fluid communication with the second circuit and water flows into the second circuit for the first time. This arrangement was invented by Dunnleider because the prior art system of heating circulating water did not work because the cold water that initially filled the system may have already been contaminated. As Dunnleider recites in page 2, lines 6-10:

According to the result of these tests, the cause for the formation of legionella despite the feeding of already disinfected water to this circulating water circuit lies essentially in that legionella is transferred into the circulating water circuit already with the first filling of the system with cold water, from which the legionella cannot be eliminated with the typical means of thermal disinfection. (emphasis added).

The prior art system to which Dunnleider refers obviously includes two circuits as well, but is flawed because the second circuit is initially filled with cold water that may have already been contaminated. Therefore, the introduction of properly disinfected water from a first circuit to said contaminated second circuit, followed by thermal treatment of the resulting mixture of decontaminated and contaminated water, is flawed, according to Dunnleider. The Dunnleider solution does not incorporate Applicants' system of two (2) separate sources of water (the branch manifold and the return manifold) so that said branch and return manifolds include, for each offtake, a pipe connection leading from the respective manifolds to respective offtakes such that each of the plurality of offtakes is connected in parallel to the branch and return manifolds, so that opening at least one offtake provides a supply of fluid to that at least one offtake via a respective pipe from the branch and return manifolds and does not affect the fluid in the pipe

connections to the other offtakes and causes the direction of fluid flow to reverse in the pipe connections that respectively connect said at least one opened offtakes with the return manifold.

Dunnleder's system includes 1) a process-water distributing line connected to a process-water collection line; 2) a non-return valve that prevents flow from the process-water distributing line to the process-water collecting line (which obviously prevents the Dunnleder system from having a reverse fluid flow as claimed by Applicant); 3) a water-quantity limiter (which is obviously not a part of Applicants' claimed invention); 4) a cold-water supply line; and 5) an access line to a loading pump via a water heater and a buffer to form a complete circuit, as set forth by Dunnleder at page 2, in the first sentence of the third paragraph. This is a far cry from Applicants' highly novel system of two manifolds, each of which is connected to a plurality of offtakes, and which provides a constant fluid flow regardless of the number of offtakes in an open configuration, said constant fluid flow enabled by a highly novel arrangement that pumps water in a first direction so that it flows from a supply vessel to a branch manifold to at least one offtake and from the at least one offtake to a return manifold and back to the supply vessel when the offtakes are closed, and which when at least one offtake is opened, causes the water returning to the supply vessel through the return manifold to reverse direction and flow toward the opened offtake so that water is pumped to said offtake from said return manifold by the pump associated with the return manifold as well as by a second pump associated with the branch manifold.

Aggregating the teachings and suggestions of Rjornsson to those of Dunnleder would not have impelled one of ordinary skill towards the invention as claimed. The Office acknowledges that Dunnleder does not teach a flow reversal in the part of the system between an offtake and a return manifold when at least one offtake is opened. However, the Office contends that opening an offtake in Dunnleder would cause the fluid to flow in a second direction opposite to the first direction "because of the work branch loop pressure that (is) generated by the pumps (14a, 14b and 14c) in the system is much greater than the atmospheric pressure. Therefore, Dunnleder meets this limitation." This position of the Office is respectfully traversed because the pressure generated by the pumps, being much greater than atmospheric pressure, causes the fluid to flow out of the offtakes, not back towards the source of such great pressure. Thus, there is no flow reversal in Dunnleder and that is why the Office is correct in finding that "Dunnleder does not explicitly disclose the fluid flow in a second direction opposite to the first direction when at least one offtake is opened."

6. Claim 18 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Dunnleeder in view of Hietanen. Reconsideration and withdrawal of this ground of rejection is requested. In the claimed invention, there is a fixed flow of water achieved at every offtake, regardless of the number offtakes open at that particular time. This cannot be achieved in any of the prior art systems because the prior art does not include two (2) feed supplies to each offtake. The claimed invention provides a first feed from the branch manifold to each offtake and a second feed from the return manifold to each offtake, the second feed taking effect when at least one offtake is open. As the Office correctly points out with regard to claim 18, Dunnleeder does not disclose at least a second hose being provided to provide communication between the return manifold and the offtake and it is clear from the discussion relating to claim 15 above that the Dunnleeder system provides no reverse flow at any time under any configuration of open or closed offtakes..

Hietanen discloses a shower system that provides more efficient control of the warming of water to a warm water faucet or a shower stopcock. Hietanen provides a heat tube within an outer tube, commonly known as a tube-in-tube heat transfer arrangement, and there is no suggestion of providing first and second supplies of water to an offtake via first and second hoses when a particular offtake is opened as claimed by Applicants. Hietanen provides a single supply when the stopcock is opened to provide more efficiently heated water rather than a particular flow rate of liquid fluid. It follows that no combination of Dunnleeder and Hietanen would have suggested to one of ordinary skill in the art the highly novel and heretofore unknown arrangement of parts invented by Applicants.

Response to Arguments

7. Applicants acknowledge the Office's response to arguments.

Conclusion

8. Applicants acknowledge the new grounds of rejection and that the outstanding Office Action is final. A Request For Continued Examination is filed herewith and a Notice of Allowance is solicited in view of the clear patentability of the claims as currently amended.

If the Office is not fully persuaded as to the merits of Applicants' position, or if an Examiner's Amendment would place the pending claims in condition for allowance, a telephone call to the undersigned at (813) 925-8505 is requested. Applicants thank the Office for its careful examination of this important patent application.

Very respectfully,

SMITH & HOPEN

By:

Ronald E. Smith
180 Pine Avenue North
Oldsmar, FL 34677
(813) 925-8505
Registration No. 28,761
Attorneys for Applicants

Dated: April 5, 2007

pc: Bailey Walsh & Co.

CERTIFICATE OF FACSIMILE TRANSMISSION
(37 C.F.R. 1.8)

I HEREBY CERTIFY that this Amendment AF, including a request For Continued Examination, Introductory Comments, Amendments to the Claims, and Remarks, is being transmitted by facsimile to the United States Patent and Trademark Office, Art Unit 3753, Attn: Cloud K. Lee, (571) 273-8300 on April 5, 2007.

Dated: April 5, 2007

April Turley
April Turley